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EXAMINER	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte REENY T. SEBASTIAN, KAREN A. BOSWELL and
BRIAN D. LEMANSKI

Appeal 2009-013901
Application 09/989,486
Technology Center 3600

Before LINDA E. HORNER, STEVEN D.A. McCARTHY and
MICHAEL W. O'NEILL, *Administrative Patent Judges*.

McCARTHY, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

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[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE" (paper delivery mode) or the "NOTIFICATION DATE" (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134 from the Examiner's final decision rejecting claims 1, 15 and 17-19. More specifically, the Examiner rejects claims 1, 15 and 17-19 under 35 U.S.C. § 103(a) as being unpatentable over Eguchi (US 5,554,969, issued Sep. 10, 1996. Claim 16 is cancelled. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We sustain the rejections of claims 15, 18 and 19. We do not sustain the rejections of claims 1 and 17.

Claim 1 is illustrative of the claims on appeal.

> 1. A method for validating a rear steering angle of a vehicle, comprising:
>
> receiving a plurality of signals indicative of said rear steering angle;
>
> checking at least one of said plurality of signals to determine if it falls within a valid range;
>
> correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine if either said first signal or said second signal is invalid; and
>
> signaling a rejection if any of said plurality of signals is found to be invalid.

Claim 17 recites a rear steering system for a vehicle including "at least one actuator in operable communication with a pair of rear wheels."

ISSUE

The Examiner appears to conclude that the subject matter of the appealed claims would have been obvious from Eguchi's summary of a motor driven power assisted steering system described by JP '875 (Sugiora,

JP S63-82875 A, publ. Apr. 13, 1988).[2] (*See* Ans. 3, citing Eguchi, col. 1, ll. 18-45.) The Appellants do not argue separately for the patentability of any claim. Based on the findings and conclusions of the Examiner, and the Appellant's arguments, this appeal turns on the following issue:

> Would the subject matter of claims 1, 15 and 17-19 have been obvious from Eguchi's summary of the system of JP '875?

FINDINGS OF FACTS

The record supports the following findings of fact ("FF") by a preponderance of the evidence.

1. Eguchi's summary of JP '875 describes a motor driven power assisted steering system which uses positioning feedback from a main steering angle in the power assisted control of the steering of the front wheels of a vehicle. The system calculates the rate of change of the output signal of the main steering angle sensor and a rate of change of the output signal of a sub steering angle sensor. The system identifies a failure of either the main steering angle sensor or the sub steering angle sensor if the rates of change of the two output signals differ or if either output signal exceeds a predetermined range. (Eguchi, col. 1, ll. 17-45.)

[2] JP '875 itself is not cited as evidence in the Examiner's statement of the ground of rejection.

ANALYSIS

Claim 1

The Examiner finds that "Eguchi discloses receiving a plurality of signals indicative of the rear steering angle." (Ans. 3.) The system of JP '875 as summarized by Eguchi describes a power assisted control for steering front road wheels. (FF 1.) The Examiner does not provide persuasive support for finding that Eguchi describes the method step of "receiving a plurality of signals indicative of the rear steering angle." While the Examiner provides additional findings and technical reasoning relating to this method step (*see* Ans. 4-5), the additional findings and technical reasoning do not articulate a persuasive reason why it would have been obvious to modify the power assisted control for steering front road wheels described by the cited passage of Eguchi to perform the step of receiving a plurality of signals indicative of a rear steering angle. We do not sustain the rejection of claim 1 under § 103(a) as being unpatentable over Eguchi.

Claims 15, 18 and 19

The Appellants contends that "[e]ach of the appealed claims recites 'receiving a plurality of signals indicative of said [a] rear steering angle'." (Reply Br. 2.) This is not true of claims 15, 18 and 19. Claims 15, 18 and 19 are apparatus claims. Claim 15 recites a "storage medium encoded with a machine readable computer program code comprising: computer code for receiving a plurality of signals indicative of a rear steering angle." Claim 19 recites "[a] controller for a rear-wheel steering system, the controller comprising: at least one input terminal for receiving a plurality of signals indicative of rear steering angle." Claim 18 recites a "controller for a rear-

wheel steering system, the controller comprising: means for receiving a plurality of signals indicative of a rear steering angle." In view of the Appellants' statements, we interpret for purposes of this appeal only the "means for receiving a plurality of signals indicative of a rear steering angle" recited in claim 18 as a suitably programmed processor, computer, memory, storage, register, timing device, interrupt, communications interface or input/output signal interface, or a combination of these elements. (*See* App. Br. 6.)

The Examiner finds that "when detecting an error between two angle measurements it is irrelevant whether the sensors are on a front wheel or rear wheel. The systems will operate the same way." (Ans. 4.) This finding implies that the structure which receives the plurality of front wheel steering angle sensor output signals in the system of JP '875 is substantially identical to, or operates in the same way as, the structure which would receive a plurality of rear wheel steering angle sensor output signals in a four-wheel steering system. The symmetry between front and back wheel steering in four-wheel steering systems supports this latter finding. The Appellant does not appear to deny the finding. The Appellant does argue that column 6, lines 17-57 of Eguchi teaches away from adapting the system of JP '875 to receive rear wheel steering angle sensor output signals in a rear wheel or four wheel drive system. (*See*, *e.g.*, App. Br. 10; Reply Br. 3.)

Nevertheless, the cited passage may be read merely as teaching that, if the system of JP '875 were used to receive and process rear wheel steering angle sensor output signals, the system would operate in the same way, and suffer the same defects, as it would receiving and processing front wheel steering angle sensor output signals.

This finding supports the Examiner's conclusion that it would have been obvious to provide the system of JP '875 with "computer code for receiving a plurality of signals indicative of a rear steering angle," "at least one input terminal for receiving a plurality of signals indicative of rear steering angle" and "means for receiving a plurality of signals indicative of a rear steering angle." The computer code recited in claim 15; the means recited in claim 18 and the at least one input terminal recited in claim 19 would operate in the same way whether it received output signals from front or wheel steering angle sensors. Absent evidence to the contrary, this implies that the "computer code for receiving a plurality of signals indicative of a rear steering angle," the "at least one input terminal for receiving a plurality of signals indicative of rear steering angle" and the "means for receiving a plurality of signals indicative of a rear steering angle" would be the same, or substantially the same, as those disclosed or necessarily present in the system of JP '875 as summarized by Eguchi.

The Appellants' contentions specific to "receiving a plurality of signals indicative of said rear steering angle" are directed to functional differences rather than to structural differences between the system of JP '875 and the structures claimed in apparatus claims 15, 18 and 19. To be persuasive, the Appellants' contentions must distinguish their claimed subject matter from the system of JP '875 in terms of structure rather than function. *See In re Schreiber*, 128 F.3d 1473, 1477-78 (Fed. Cir. 1997). Since Eguchi discloses or suggests structure meeting the limitations of claims 15, 18 and 19, we sustain the rejections of claims 15, 18 and 19 under § 103(a) as being unpatentable over Eguchi.

Claim 17

Claim 17 is distinct from claims 15, 18 and 19 because it includes the limitation "at least one actuator in operable communication with a pair of rear wheels." This limitation requires the use of rear wheels to be steered. The passage of Eguchi cited by the Examiner does not describe an actuator in operable communication with a pair of rear wheels. The Examiner provides no persuasive reason why a system meeting this limitation would have been obvious from Eguchi's summary of the system of JP '875. In view of the Appellants' general contention that the cited passage Eguchi fails to disclose receiving a plurality of signals indicative of rear steering angle, we do not sustain the rejection of claim 17 under § 103(a) as being unpatentable over Eguchi.

DECISION

We AFFIRM the Examiner's decision rejecting claims 15, 18 and 19.

We REVERSE the Examiner's decision rejecting claims 1 and 17.

AFFIRMED-IN-PART

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